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ABSTRACT

This manual has four purposes. They are: (1) to list test analysis services available to teachers, (2) to explain information on the analysis printouts, (3) to provide help in interpreting analysis results, and (4) to suggest possible uses of test analysis data. It is noted that test analyses services are available to teachers for teacher-made tests and surveys if standard answer sheets are used, as well as for some standardized tests. Any one or all of the following services may be selected: (1) class performance analysis, (2) item analysis, (3) frequency distribution, and/or (4) response analysis. It is felt that by using the data generated, teachers will be helped in planning instruction, in evaluating student progress, and in improving test items. (Author)

TEST ANALYSIS MANUAL

ED 069722

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Acknowledgments

The Test Analysis Manual was developed in response to needs of and requests from instructional personnel in Escambia County. The handbook was compiled by participants and consultants in a workshop sponsored by Evaluation Services and funded through Educational Improvement Expense allocations (EIE).

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Introduction

This manual has four purposes:

1. To list test analysis services available to teachers.
2. To explain information on the analysis printouts.
3. To provide help in interpreting analysis results.
4. To suggest possible uses of test analysis data.

Test analysis services are available to teachers for teacher-made tests and surveys if standard answer sheets are used. These services are also available for some standardized tests.

Answer sheets are scored and analyzed; results are returned on printout sheets. Any or all of the following services may be selected:

A. Class performance analysis
B. Item analysis
C. Frequency distribution
D. Response analysis

Use of data can help teachers in planning instruction, in evaluating student progress and in improving test items. Suggestions have been listed for using each printout; moreover, additional ways of utilizing these printouts will be found through use.

Class Performance Analysis

Class performance analysis printouts provide a complete picture of each individual student's performance on a test. This sheet shows the per cent and total number of correct answers, the total number of incorrect answers and the total number of items not answered for each student. The printout also shows the specific response of each student to each item as well as listing standard scores for students.

The class performance analysis aids the teacher in:

1. Scoring and arranging results of tests in usable form.
2. Diagnosing strengths and weaknesses of individual students.
3. Grouping students according to varied levels of instruction.
4. Making individual pupil comparisons of pre- and post-test results.
5. Grading by use of per cent or standard score.

FOLD OUT FOR SAMPLE PRINTOUT

RUN BY EEDPC ON:
07/14/71

CLASS PERFORMANCE ANALYSIS

(1) MATH DATE 00/00/00 GRADE 08 SECTION 30 SCHOOL 60 JONES (2) NUMBE NUMBI

(3) MARKING CODE: DASH - CORRECT, LETTERS A THROUGH E INCORRECT, ASTERISK * NO ANSWER

QUESTION NO (4)

```
                                                                  1         2         3         4         5
                                                        12345678901234567890123456789012345678901234567890123
RIGHTS WRONGS     ST NO    STUDENT NAME
  (6)  (7)  (8)  (9)   (10)       (11)          KEY (5)  CBCABDBACABEACADACBBCBDACBCDACDBCACBCDDDEBBECBDADE
   %  TOT  TOT  N-A
  64   32    5   13 000000001 ASHBY        MARK    ----*-------A-*--B--*-D-------D-----B*-*****-----*
  62   31   19    0 000000002 BAXTER       KATHRY  ------E--E-C-D-E-BAD----AAA-----AC---C-B-CE-B--D--
  68   34   15    1 000000003 CULBREATH    JE!     ------CE-EDD-E----AE-----C--E---B---*--C-DC----E--
  42   21   18   11 000000004 EASLER       ELIZAB  ----*---ECD-*---EE--A---*E*B-EADECEE**-A-CE------*
  48   24   25    1 000000015 EATON        JANICE  ----CA----*--EEE-EED-E--EEAAEEA-BCE-EE-E-C----ED--
  56   28   22    0 000000005 ENGSKOW      JOHN    ------E---A--EE--3E--E--EAAAEAEDD--DEACB-C--------
  48   24   26    0 000000007 FRATELLO     ANNE    ----EA----ADBE-E-BADBA--BD-ED--AEB--DBAAAA-----D--
  42   21   23    6 000000008 GEARING      DARLE   ----*-----AB-*---EAEAE-C-AAACA-DAB-DBCE--AAD--*****
  60   30   11    9 000000009 GINES        MODEST  -----*---E-B------*D-C----*****-****-AE-ABCC------D
  72   36   14    0 000000125 GIRARD       KAREN   ----------DDC--E--ED--C---AA-A--C-D------D----E--
  66   33   17    0 000000356 GOODWIN      CYNTH   -D----D-E-DC---ED-A---C--CBC-D------E--A-A-----E--
  72   36   14    0 000000012 HAMEL        DEBRA   ---------EAC------EC-C----B-----DEA-EC---CC-------
  68   34    8    8 000000013 HILLIARD     RICH    ------A--**C----C----E--*DE*----B--*--A-------***
  42   21   29    0 000000014 HORN         PETE    --E-D-D-A-DCBEBC-BE--EC--CAA-AADB-DCDBBC-A----E---
  44   22   28    0 000000006 HUKLE        MARY    --------AEEA-E-E-EEEEACEDCBE---AEB-DBCCA--A--E-C--
  68   34   16    0 000000016 KASPARIAN    S P     ----------EBC----BE------AA-A-DEC---BEA-C----E---
  20   10   20   20 000000017 LAMPER       CHERRE  -E--*AC-AEEC-*-E-AE*D*CB*CA*-AAE***D**C*****------
  58   29   19    2 000000018 LEEMAN       NANCY   ------E--E*C-E-E-EEE-----*-DE-E--AEEE---A-EE-----A-
  40   20   27    3 000000019 LINVILLE     CHER    ---EC-C--EAA---EBBDDA*CEBC-E-E--EB-D**-C-EA---ADA-
  54   27   23    0 000000020 LOPEZ        SUSAN   -----BE--BED---CBBEE---E-CAA--A-AC-CBB-C-DC-------
  56   28   22    0 000000021 MACNEIL      LOUIS   -------C-A-E------E-DAD--BAAAEE-DEB--ECCA-C-----D--
  58   29   20    1 000000022 MANNERS      ROSEM   ---C--*EE-DD---E-EA---C--CAAEE--EE---E-B--E--C----
  40   20    8   22 000 000 3 MAY                  --*****---*BB*---EA*-E--*C*B-*---*--B*-*****-------
  58   29   21    0 000000024 MIDCAFF      KATHI   ----E--CDEAA-----A-EE-C-E-DE----E----ECC-E-A-AE---
  60   30   20    0 000000025 PAVONE       DAVID   ----D-A---ED-A-A---D-D----AACA--EBEC---B-----ACE--
  82   41    8    1 000000026 REED         EDWARD  ----------EA----*-ED-D----------B-------------AD
  64   32   17    1 000000027 ROHWEDDER    DAN     ----------EB--BADAE--*----AA--AC-C--DEBC-----*-E--
  42   21   29    0 000000028 RYMAN        PATSY   ----EAE-EEDB-EEE-EDD-A---AAA-E-AEB--EABC-CD---E-E-
  52   26   23    1 000000029 SMITH        CAROL   ---D-----ED--E-C--*D-EC--CBCCAA-DB-EEECA-A-----E--
  60   30   19    1 000000030 STARR        GLYNNE  ----C-C---EA-----EEDA*B---AB---*AB--BAC--DD----D--
  66   33   17    0 000000031 TOWNSEND     CATH    ------EBA-A------AA-----B-DE-A--AC--EA-A-C------C-
  76   38   12    0 000000032 TRIGGS       MELIND  ----------CB------ED-E---CAA---------B----AC----D--
  52   26   24    0 000000033 WALTERS      SHIRL   ----D-A---E--E-E-AADAEE-E-BA-AEABBE--E-A--C----B--
  64   32   15    3 000000034 WEBER        DEBRA   ------C-AEC--E---BEE------A-----B---E-BA-AD----***
```

CLASS PERFORMANCE ANALYSIS

PAGE 1

ADE 08 SECTION 30 SCHOOL 60 JONES

(2) NUMBER OF STUDENTS 34
NUMBER OF QUESTIONS 050

THROUGH E INCORRECT, ASTERISK * NO ANSWER QUESTIONS BEGINNING 001

(4) 1 2 3 4 5 6 7 8
12345678901234567890123456789012345678901234567890123456789012345678901234567890

KEY (5) CBCABDBACABEACADACBBCBDACBCDACDBCACBCDDDEBBECBDADE (12) STD SCR

```
ARK    ----*------A-*--B--*-D-------D-----B*-*****-*****                 56
ATHRY  ------E--E-C-D-E-BAD----AAA-----AC---C-B-CE-B--D--                 54
EI     ------CE-EDD-E----AE-----C--E---B---*--C-DC----E--                 59
LIZAB  ----*-*--ECD-*---EE--A--*E*B-EADECEE***-A-CE---****                 39
ANICE  ----CA----*--EEE-EED-E--EEAAEEA-BCE-EE-E-C----ED--                 43
OHN    ------E---A--EE--BE--E--EAAAEAEDD--DEACB-C--------                 50
NNE    ----EA----ADBE-E-BADBA--BD-ED--AEB--DBAAAA-----D--                 43
ARLE   ----*-----AB-*---EAEAE-C-AAACA-DAB-DBCE--AAD-*****                 39
DDEST  ---------E-B------*D-C---*****-****-AE-ABCC------D                 53
AREN   ----------DDC--E--ED--C---AA-A---C-D------D----E--                 62
YNTH   -D----D-E-DC---ED-A---C--CBC-D------E--A-A-----E--                 57
EBRA   ---------EAC------EC-C----B-----DEA-EC---CC-------                 62
ICH    ------A--**C----C----E--*DE*-----B--*--A----------***                 59
ETE    --E-D-D-A-DCBEBC-BE--EC--CAA-AADB-DCDBBC-A----E---                 39
ARY    --------AEEA-E-E-EEEEACEDCBE---AEB-DBCCA--A--E-C--                 40
P      ----------EBC----BE-------AA-A-DEC---BEA-C----E---                 59
HERRE  -E--*AC-AEEC-*-E-AE*D*CB*CA*-AAE***D**C*****-*****                 21
ANCY   ------E--E*C-E-E-EEE----*-DE-E--AEEE---A-EE-----A-                 51
HER    ---EC-C--EAA---EBBDDA*CEBC-E-E--EB-D**-C-EA---ADA-                 37
USAN   -----BE--BED---CBBEE---E-CAA--A-AC-CBB-C-DC-------                 48
QUIS   ------C-A-E------E-DAD--BAAAEE-DEB--ECCA-C-----D--                 50
DSEM   ---C--*EE-DD---E-EA---C--CAAEE--EE---E-B--E--C----                 51
       --*****-**-*BB*---EA*-E--*C*B-*---*--B*-*****-*****                 37
ATHI   ----E--CDEAA-----A-EE-C-E-DE----E----ECC-E-A-AE---                 51
AVID   ----D-A---ED-A-A---D-D----AACA--EBEC---B-----ACE--                 53
DWARD  ----------EA----*-ED-D--------------B----------AD                 70
AN     ----------EB--BADAE-------AA--AC-C--DEBC-----*-E--                 56
ATSY   ----EAE-EEDB-EEE-EDD-A---AAA-E-AEB--EABC-CD---E-E-                 39
AROL   ---D-----ED--E-C--*D-EC--CBCCAA-DB-EEECA-A-----E--                 46
LYNNE  ----C-C---EA-----EEDA*B---AB----AB--BAC--DD----D--                 53
ATH    ------EBA-A------AA-----B-DE-A--AC--EA-A-C------C-                 57
CLIND  ----------CB------ED-E---CAA---------B----AC----D--                 65
NIRL   ----D-A---E--E-E-AADAEE-E-BA-AEABBE--E-A--C----B--                 46
EBRA   ------C-AEC--E---BEE------A-----B---E-BA-AD----***                 56
```

Explanation: Class Performance Analysis Printout

The numbers below refer to the numbers circled on the sample printout.

General information includes:

1. Reading from left to right, subject, date, grade, section number, school number and teacher's name.
2. Number of students and number of questions.
3. Marking Code:
   a. Dash (-) indicates a correct answer
   b. Letters A through E indicate incorrect answers.
   c. Asterisk (*) indicates no answer was given.
4. Question Number. To read one-digit numbers, use the first group of numbers 1-9 on the bottom scale. For two-digit numbers, read the top number as a multiple of 10 and add the bottom digit.

```
                                   1                   2
EXAMPLE:  1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0
  To read Item 18, read the 1 on the top scale
  as ten, then locate the eight to the right.
```

5. Key. The row of letters to the right of the word KEY indicates the correct response for each item. Read the number of the question; then directly below find the letter of the alphabet which indicates the correct answer. For example, C is the correct answer for Item 1.

Information for each student includes:

6. %. Per cent of questions answered correctly.
7. RIGHTS TOT. Total number of correct responses.
8. WRONGS TOT. Total number of incorrect responses.
9. N-A. Total number of items not answered.
10. ST NO. Student's identification number if used.
11. STUDENT NAME. Student's name.
12. STD SCR. Standard scores on the printout apply only to the group for whom the particular frequency distribution is listed. Standard scores are units of measurement which tell the distance a given score is from the mean. Standard scores used in Escambia County range from a low of 20 to a high of 80. The mean of a standard score distribution is 50; the standard deviation is 10. In a normal distribution, 68% of pupils' scores will lie between 40-60; 95% between 30-70; and 99% between 20-80.

Example: Mark Ashby had a raw score of 32 and correctly answered 64% of the total number of items. He had five wrong answers; thirteen questions were not answered. His answer for Item 37 was B; the correct answer was C. Mark correctly answered ten out of the first eleven questions; however his answer for Item 12 was incorrect. He failed to answer Items 40-44. His standard score was 56 which indicated that the score was just above the mean.

Item Analysis

Item analysis printouts record the performance of the total group on each item and the frequency with which the high- and low-scoring groups chose alternate responses to each item. Both the difficulty level and the discrimination index are also listed for each item.

The item analysis aids the teacher in:

1. Analyzing pupil performance on each test item.
2. Detecting learning difficulties of the class as a whole.
3. Identifying areas or skills needing initial instruction, review or remediation.
4. Indicating pupil achievement of objectives.
5. Selecting items for development of a test.
6. Identifying structural or content defects in test items.
7. Revising and refining tests.

FOLD OUT FOR SAMPLE PRINTOUT →

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07/15/71

ITEM ANALYSIS

(1) MATH DATE 00/00/00 GRADE 08 SECTION 30 SCHOOL 60 JONES (2)

(3) ITEM ANALYSIS SHEET - INDICATES CORRECT RESPONSE TO QUESTIONS, % INDICATES % CORRECT.

ITEM (4)	A	B	C	D	E	N-A	% (5)	DISC INDEX (6)	ITEM	A	B
1	0	0	11-	0	0	0	100		2	0	10-
	0	0	11-	0	0	0	100			0	10-
	0	0	34-	0	0	0	100	.00		0	32-
3	0	0	11-	0	0	0	100		4	11-	0
	0	0	9-	0	1	1	81			9-	0
	0	0	32-	0	1	1	94	.18		30-	0
5	0	11-	0	0	0	0	100		6	0	0
	0	1-	2	2	2	4	9			4	0
	0	20-	3	3	3	5	58	.91		4	1
7	1	6-	2	1	1	0	54		8	9-	1
	1	5-	2	1	1	1	45			10-	0
	3	15-	6	2	6	2	44	.09		29-	1
9	2	0	8-	0	1	0	72		10	7-	0
	3	0	6-	0	1	1	54			6-	0
	6	0	23-	1	3	1	67	.18		19-	1
11	2	0-	2	3	3	1	0		12	1	3
	3	0-	1	2	3	2	0			2	3
	7	3-	3	7	10	4	8	.00		6	7
13	9-	0	2	0	0	0	81		14	0	0
	8-	3	0	0	0	0	72			0	0
	29-	3	2	0	0	0	85	.09		1	0
15	10-	1	0	0	0	0	90		16	1	0
	8-	1	0	0	2	0	72			0	0
	29-	2	0	0	3	0	85	.18		2	0
17	7-	0	1	2	0	1	63		18	2	2
	10-	1	0	0	0	0	90			2	3
	27-	3	1	2	0	1	79	-.27		5	8
19	3	1-	0	0	7	0	9		20	0	5-
	4	0-	0	2	5	0	0			0	2-
	9	5-	0	2	16	2	14	.09		0	9-
21	0	0	11-	0	0	0	100		22	0	7-
	3	1	5-	1	1	0	45			4	0-
	5	1	25-	1	2	0	73	.55		4	12-

ITEM ANALYSIS

PAGE 2

SECTION 30 SCHOOL 60 JONES

(2) NUMBER OF STUDENTS 34
NUMBER OF QUESTIONS 050

E TO QUESTIONS, % INDICATES % CORRECT.

% (5)	DISC INDEX (6)	ITEM	A	B	C	D	E	N-A	%	DISC INDEX
00		2	0	10-	0	1	0	0	90	
00			0	10-	0	0	1	0	90	
00	.00		0	32-	0	1	1	0	94	.00
00		4	11-	0	0	0	0	0	100	
81			9-	0	0	0	1	1	81	
94	.18		30-	0	1	1	1	1	88	.18
00		6	0	0	0	11-	0	0	100	
9			4	0	0	7-	0	0	63	
58	.91		4	1	0	29-	0	0	85	.36
54		8	9-	1	0	0	1	0	81	
45			10-	0	0	0	0	1	90	
44	.09		29-	1	1	0	2	1	85	-.09
72		10	7-	0	0	0	3	1	63	
54			6-	0	0	0	5	0	54	
67	.18		19-	1	0	0	13	1	55	.09
0		12	1	3	3	2	2-	0	18	
0			2	3	2	2	2-	0	18	
8	.00		6	7	7	7	7-	0	20	.00
81		14	0	0	9-	0	2	0	81	
72			0	0	1-	0	6	4	9	
85	.09		1	0	16-	1	11	5	47	.73
90		16	1	0	0	8-	2	0	72	
72			0	0	1	3-	7	0	27	
85	.18		2	0	3	17-	12	0	50	.45
63		18	2	2	7-	0	0	0	63	
90			2	3	0-	0	6	0	0	
79	-.27		5	8	11-	0	10	0	32	.64
9		20	0	5-	1	3	2	0	45	
0			0	2-	0	5	2	2	18	
14	.09		0	9-	1	14	7	3	26	.27
00		22	0	7-	1	1	2	0	63	
45			4	0-	0	0	5	2	0	
73	.55		4	12-	2	4	9	3	35	.64

Explanation: Item Analysis Printout

The numbers below refer to the number circled on the sample printout.

1. Reading from left to right, subject, date, grade, section number, school number and teacher's name.

2. Number of students and number of questions.

3. Dash: Indicates correct response to an item. % indicates per cent correct.

4. ITEM: The number of the test question. Odd-numbered items are on the left; even-numbered items are on the right. The printout shows the number of responses to each alternative (A, B, C, D, E) for each item. The top row lists responses for the upper third of the group based on total rights; the second row lists the lower third of the group; the third row lists the total group.

   Example. Item 5. 11 students in the upper third of the group chose B which is the correct answer; one student in the lower third chose answer B; 20 students in the total group selected B. No students in the upper third selected A, C, D, or E; in the lower third no student chose A but two selected C, two selected D and two selected E; in the total group no one selected A but three selected C, three selected D and three selected E.

5. % (per cent). Indicates the level of difficulty of each item. Lists the per cent of students correctly answering each item.

   Example. Item 5. 100% of the students in the upper third answered Item 5 correctly; 9% of the lower third answered correctly; 58% of the total group correctly answered Item 5.

6. DISC INDEX (Discrimination Index). A measure of how well each item discriminates or distinguishes between those who scored high on the test and those who scored low on the test. The discrimination index ranges from +1.0 to -1.0. A positive correlation indicates that the item was answered correctly by more high scorers than low scorers; a zero correlation indicates that the item was answered correctly by as many low scorers as high scorers; a negative correlation indicates that the item was answered correctly by more low scorers than high scorers.

   Example. On Item 22, 7 students in the upper third answered correctly; no students in the lower third answered correctly; the discrimination index is .64. However on Item 17, 7 students in the upper third answered correctly; 10 students in the lower third; the discrimination index is -.27 since more students in the lower group answered correctly. On Item 1, 11 students in the upper group answered correctly and 11 students in the lower group answered correctly; therefore the discrimination index of the item is .00 since the same number of students in each group answered the item correctly.

Frequency Distribution

Frequency distribution printouts are graphic presentations of students' scores indicating relative performance on a particular test. This sheet lists the distribution and the frequency of the students' total scores based on total right answers. Also included are mean, median, standard deviation, standard error of measurement, KR-20 reliability coefficient and standard scores.

The frequency distribution aids the teacher in:

1. Determining the average performance of the group.
2. Indicating the variability or spread of the scores.
3. Determining the reliability of the test.
4. Comparing a pupil's performance with the group's performance.
5. Making group comparisons between pre- and post-test results.
6. Comparing one group to other groups on the same test.

FOLD OUT FOR SAMPLE PRINTOUT

RUN BY EEDPC ON:
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FREQUENCY DISTRIBUTION

1 MATH DATE 00/00/00 GRADE 08 SECTION 30 SCHOOL 60 JONES

STD SCR 3	TOT RT 4	# OF STUD 5	PLOT OF FREQUENCY DISTRIBUTION 6 M EQUALS 1
00	50	0	
	49	0	
	48	0	
	47	0	
	46	0	
	45	0	
	44	0	
	43	0	
	42	0	
70	41	1	M
	40	0	
	39	0	
65	38	1	M
	37	0	
62	36	2	MM
	35	0	7
59	34	3	MMM
57	33	2	MM
56	32	3	MMM
54	31	1	M
53	30	3	MMM
51	29	3	MMM
50	28	2	MM
48	27	1	M
46	26	2	MM
	25	0	
43	24	2	MM
	23	0	
40	22	1	M
39	21	4	MMMM
37	20	2	MM
	19	0	
	18	0	
	17	0	
	16	0	
	15	0	
	14	0	
	13	0	
	12	0	
	11	0	
21	10	1	M
	9	0	
	8	0	
	7	0	
	6	0	
	5	0	
	4	0	
	3	0	
	2	0	

8 STATISTICS IN RAW SCORES

11

FREQUENCY DISTRIBUTION

PAGE 3

SECTION 30 SCHOOL 60 JONES

(2) NUMBER OF STUDENTS 34
NUMBER OF QUESTIONS 050

(9) MEAN = 28.29
ST DEV = 6.31 (10)

(8) STATISTICS IN RAW SCORES

(11) MEDIAN = 29.00

STANDARD ERROR = 2.82 (12)
KR-20 RELIABILITY (R) = .80 (13)

Explanation: Frequency Distribution Printout

The numbers below refer to the numbers circled on the sample printout.

1. Reading from left to right, subject, date, grade, section number, school number and teacher's name.

2. Number of students and number of questions.

3. STD SCR. Standard scores on the printout apply only to the group for whom the particular frequency distribution is listed. Standard scores are units of measurement which tell the distance a given score is from the mean. Standard scores used in Escambia County range from a low of 20 to a high of 80. The mean of a standard score distribution is 50; the standard deviation is 10. In a normal distribution, 68% of pupils' scores will lie between 40-60; 95% between 30-70; and 99% between 20-80.

4. TOT RT. Total right answers.

5. # OF STUDENTS. Number of students making a designated score.

6. PLOT OF FREQUENCY DISTRIBUTION. M EQUALS 1. Indicates how many students are represented by each M.

7. M. Tallies indicating individual scores.

8. STATISTICS IN RAW SCORES. The following are computed in raw scores: mean, standard deviation, median, standard error and KR-20 reliability.

9. MEAN. An arithmetic "average" of a set of scores.

10. STANDARD DEVIATION (S.D.). A measure of the variability or "spread" of a set of scores. The closer the scores are to the mean, the smaller the standard deviation. In a normal distribution, 68% of the scores are within the range from one S.D. below the mean to one S.D. above the mean.

11. MEDIAN. A point dividing scores into two equal groups. The "middle" score.

12. STANDARD ERROR. No test has perfect reliability with the result that an individual should be considered as scoring within a range from several points below to several points above the obtained score on a test. For example, a test has a standard error of 4 points. This means that there are two out of three chances that the true test score of a person who has a raw score of 60 could be as much as 4 points above or 4 points below that score; thus the true score might be as low as 56 or as high as 64.

13. KR-20 RELIABILITY COEFFICIENT (R). An indication of whether similar results would be obtained if the same test or an equivalent form were administered to the same students; the consistency with which a test is measuring what it does measure. If the reliability coefficient is high (.75 or greater), one can be reasonably confident that an individual's score would not change substantially if he were to retake the same test or an alternate form.

Response Analysis

Response analysis printouts are tabulations of the responses of the total group to each item. The printout lists the number and the per cent of students responding to each alternative (A, B, C, D, E) for each item.

The response analysis aids the teacher in:

1. Evaluating surveys and attitudinal questionnaires.
2. Analyzing responses on each item.

FOLD OUT FOR
SAMPLE PRINTOUT

RUN BY EEDPC ON:
07/15/71

RESPONSE ANALYSIS

(2) SCHOOL: 60 GRADE: 08 SECTION: 30 TEACHER: JONES

(4) RESPONSES

QUESTION	A	B	C	D	E	NA
1	0	0	34	0	0	0
2	0	32	0	1	1	0
3	0	0	32	0	1	1
4	30	0	1	1	1	1
5	0	20	3	3	3	5
6	4	1	0	29	0	0
7	3	15	6	2	6	2
8	29	1	1	0	2	1
9	6	0	23	1	3	1
10	19	1	0	0	13	1
11	7	3	3	7	10	4
12	6	7	7	7	7	0
13	29	3	2	0	0	0
14	1	0	16	1	11	5
15	29	2	0	0	3	0
16	2	0	3	17	12	0
17	27	3	1	2	0	1
18	5	8	11	0	10	0
19	9	5	0	2	16	2
20	0	9	1	14	7	3
21	5	1	25	1	2	0
22	4	12	2	4	9	3
23	0	1	9	23	1	0
24	29	1	1	0	3	0
25	1	4	19	1	4	5
26	5	14	11	2	2	0
27	17	5	5	3	1	3
28	14	3	2	6	6	3
29	24	0	3	1	5	1
30	10	0	13	2	7	2
31	7	0	0	24	2	1
32	4	22	1	6	1	0
33	6	5	8	3	10	2
34	9	11	8	0	3	3
35	1	0	25	1	5	2
36	0	22	3	6	3	0
37	1	8	8	3	9	5
38	4	4	5	9	7	5
39	1	4	7	20	2	0
40	13	4	7	6	1	3
41	1	1	0	0	29	3
42	7	8	10	3	1	3
43	3	14	6	4	4	3
44	1	0	0	1	29	3
45	0	1	33	0	0	0
46	2	29	1	0	1	1
47	1	0	1	22	5	5
48	12	1	1	7	6	7
49	3	0	1	22	:	7
50	0	0	0	2	25	7
(6) TOTAL:	391	285	359	269	292	104

(7) TOTAL:

(1) NUMBER OF STUDENTS 34
SUBJECT: MATH (3) TEST-DATE: 00/00/00
(5) PER CENT

	A	B	C	D	E	NA
	0.00	0.00	100.00	0.00	0.00	0.00
	0.00	94.12	0.00	2.94	2.94	0.00
	0.00	0.00	94.12	0.00	2.94	2.94
	88.24	0.00	2.94	2.94	2.94	2.94
	0.00	58.82	8.82	8.82	8.82	14.71
	11.76	2.94	0.00	85.29	0.00	0.00
	8.82	44.12	17.65	5.88	17.65	5.88
	85.29	2.94	2.94	0.00	5.88	2.94
	17.65	0.00	67.65	2.94	8.82	2.94
	55.88	2.94	0.00	0.00	38.24	2.94
	20.59	8.82	8.82	20.59	29.41	11.76
	17.65	20.59	20.59	20.59	20.59	0.00
	85.29	8.82	5.88	0.00	0.00	0.00
	2.94	0.00	47.06	2.94	32.35	14.71
	85.29	5.88	0.00	0.00	8.82	0.00
	5.88	0.00	8.82	50.00	35.29	0.00
	79.41	8.82	2.94	5.88	0.00	2.94
	14.71	23.53	32.35	0.00	29.41	0.00
	26.47	14.71	0.00	5.88	47.06	5.88
	0.00	26.47	2.94	41.18	20.59	8.82
	14.71	2.94	73.53	2.94	5.88	0.00
	11.76	35.29	5.88	11.76	26.47	8.82
	0.00	2.94	26.47	67.65	2.94	0.00
	85.29	2.94	2.94	0.00	8.82	0.00
	2.94	11.76	55.88	2.94	11.76	14.71
	14.71	41.18	32.35	5.88	5.88	0.00
	50.00	14.71	14.71	8.82	2.94	8.82
	41.18	8.82	5.88	17.65	17.65	8.82
	70.59	0.00	8.82	2.94	14.71	2.94
	29.41	0.00	38.24	5.88	20.59	5.88
	20.59	0.00	0.00	70.59	5.88	2.94
	11.76	64.71	2.94	17.65	2.94	0.00
	17.65	14.71	23.53	8.82	29.41	5.88
	26.47	32.35	23.53	0.00	8.82	8.82
	2.94	0.00	73.53	2.94	14.71	5.88
	0.00	64.71	8.82	17.65	8.82	0.00
	2.94	23.53	23.53	8.82	26.47	14.71
	11.76	11.76	14.71	26.47	20.59	14.71
	2.94	11.76	20.59	58.82	5.88	0.00
	38.24	11.76	20.59	17.65	2.94	8.82
	2.94	2.94	0.00	0.00	85.29	8.82
	20.59	23.53	29.41	8.82	8.82	8.82
	8.82	41.18	17.65	11.76	11.76	8.82
	2.94	0.00	0.00	2.94	85.29	8.82
	0.00	2.94	97.06	0.00	0.00	0.00
	5.88	85.29	2.94	0.00	2.94	2.94
	2.94	0.00	2.94	64.71	14.71	14.71
	35.29	2.94	2.94	20.59	17.65	20.59
	8.82	0.00	2.94	64.71	2.94	20.59
	0.00	0.00	0.00	5.88	73.53	20.59
(7) TOTAL:	23.00	16.76	21.12	15.82	17.18	6.12

Explanation: Response Analysis Printout

The numbers below refer to the numbers circled on the sample printout.

1. Number of students.

2. Reading from left to right, school number, grade, section number and teacher's name.

3. Subject and date of test.

4. Responses. Shows the number of responses to each alternative (A, B, C, D, E) for each item. The NA column indicates the number of students not responding to the item.

5. Per cent. Shows the per cent of responses to each alternative (A, B, C, D, E) for each item. The NA column indicates the per cent of students not responding to the item.

6. Total. Lists the total number of responses to each alternative (A, B, C, D, E) for the entire test.

7. Total. Lists the total per cent of responses to each alternative (A, B, C, D, E) for the entire test.

Example: Item 9. Six students or 17.65% selected alternative A; no students or 0.0% selected B; 23 students or 67.65% chose C; one student or 2.94% responded D; three students or 8.82% chose E; one student or 2.94% did not respond to Item 9.

Steps for Obtaining Test Scoring and Analysis Services

A. Standard Answer Sheets

1. The school office can requisition standard answer sheets from the Materials Warehouse. Use the warehouse requisition when ordering.
2. Students should record responses on standard answer sheets.
3. #2 pencils must be used in marking the answer sheets. Do not use ball-point or felt pens.
4. Student names should be gridded on the answer sheets; however do not grid names if it is desired that responses be anonymous.
5. Students numbers should be gridded on the answer sheets when appropriate. If pre-post evaluation is desired, student numbers must be gridded. The same student number should not be assigned to any two students; a student should use the same number for both tests.

B. Form: Request for Test Scoring and Test Analysis

1. The school office should have a supply of the yellow request forms. Forms can be requested by telephone from Evaluation Services and will be sent by courier upon request.
2. Complete all information requested on the form.
3. Check the services requested.

C. Preparing Materials for Scoring and Analysis

1. Prepare keys and answer sheets as indicated on the request form.
2. Send or bring completed request form, key and answer sheets to:

   Evaluation Services
   Educational Services Center
   5404 Lillian Highway

D. Receiving Test Results from Evaluation Services

1. Scoring Services: If answer sheets are sent to Evaluation Services by courier, allow 3-4 days for results to be returned. If answer sheets are delivered personally, it will require 10-15 minutes to score the answer sheets provided you call to schedule processing time; however remember to call ahead.
2. Analysis Services: If answer sheets are sent to Evaluation Services by courier, allow 7-8 days for printouts to be returned to the school. If answer sheets are delivered personally, allow 3-4 days for printouts to be returned to the school; however remember to call ahead to schedule processing time.

For further information, call Evaluation Services: 456-8631, ext. 226 or 227.

REQUEST FOR TEST SCORING AND TEST ANALYSIS

1.0 COMPLETE THE FOLLOWING INFORMATION.

1.1 School Name

1.2 Teacher's Name

1.3 Subject Name

1.4 Date (use numerals) ___ / ___ / ___

1.5 Grade

1.6 Section Number

1.7 Number of Student Answer Sheets Attached

1.8 Number of Questions

1.9 Number of Sections Using the Same Key

2.0 CHECK THE SERVICES REQUESTED.

2.1 Scoring (printing the number of total rights on each answer sheet) ☐

2.2 Class Analysis ☐

2.3 Item Analysis ☐

2.4 Frequency Distribution ☐

2.5 Response Analysis ☐

2.6 Test Analysis Printouts (includes 2.2-2.5) ☐

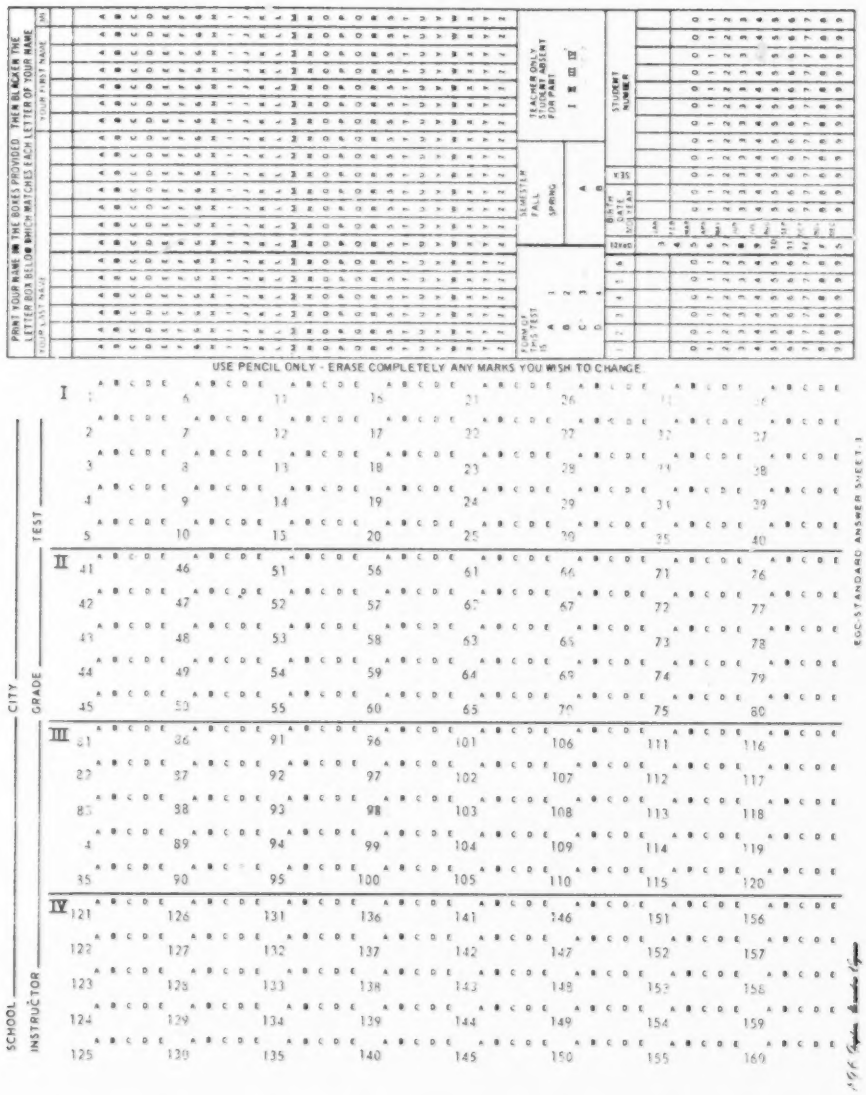
3.0 PREPARE A KEY AS INDICATED BELOW.
3.1 Mark the correct answers on an answer sheet.
3.2 In the space for city, write the word "KEY".

4.0 PREPARE ANSWER SHEETS AS INDICATED BELOW.
4.1 Separate answer sheets by section.
4.2 Place one copy of this form on top of each section of answer sheets.
4.3 Enclose the KEY with each section of answer sheets. (If the same key is to be used in scoring more than one section of answer sheets, attach only one key.)

5.0 SEND OR BRING THIS FORM, KEY AND ANSWER SHEETS TO:
Evaluation Services
Educational Services Center
5404 Lillian Highway

6.0 FOR FURTHER INFORMATION, CALL EVALUATION SERVICES: 456-8631, ext. 226 or 227.

Standard Answer Sheet



Contact Evaluation Services if you plan to use any answer sheet other than the one above.